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ABSTRACT

In order to measure the effect of a human relations, sensitivity training, T-group course offering in the sociology curriculum at the College of DuPage, the Personal Orientation Inventory, an instrument designed to measure self-actualization, was administered to 13 students before and after their participation in a semi-intensive, nonresidential, T-group experience over two consecutive weekends. A comparison of the group's performance before and after the T-group experience revealed significant changes over the two scales measuring: (1) an individual's ability to utilize time in the Present; (2) an individual's ability not to be overly directed by others. Besides measuring the affective change for students in the T-group, this study explores the union among traditional learning theories, gestaltists, field theorists, third-force, and humanistic theorists by means of a comprehensive literature review. (NHM)

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A T-GROUP APPROACH ADVANCED BY THIRD-FORCE LEARNING THEORISTS AND APPLIED TO A COLLEGE CLASS POPULATION WITH CHANGE POTENTIAL MEASURED BY TWO SELF-ACTUALIZATION FACTORS

A JOINT PROJECT WITH
THE OFFICE OF INSTITUTIONAL RESEARCH
COLLEGE OF DUPAGE

by

Mario R. Reda

College of DuPage

A PRACTICUM PRESENTED TO NOVA UNIVERSITY IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE
DEGREE OF DOCTOR OF EDUCATION

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APRIL 12, 1976

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ABSTRACT

This study was multidimensional: (1) it measured affective change for students in a college T group; (2) it explored the union between traditional learning theorists, gestaltists, field theorists, third-force and humanistic theorists.

The study was designed to measure students' affective change through the application of the human-relations, sensitivity-training, T-group approach. The actual group was a course offered in the undergraduate sociology curriculum at the College of DuPage, Omega College, Glen Ellyn, Illinois. The research effort was facilitated by the practicum program of Nova University, Fort Lauderdale, Florida, and the Office of Institutional Research at the College of DuPage.

The inspection of this course is accomplished through the administration of an 150-question inventory designed by E. Shostrom, which is based upon the concepts set forth by a leading third-force theorist, Abraham Maslow. The inventory sets out to measure self-actualization and has been used extensively in therapy as a positive indices to examine mental health. An emerging literature is now evolving in which the POI is being used in human relations situations. The two factors measured in this practicum were: (1) behavioral change as shown by the group m score on the Time Competency Scale; and, (2) behavioral change as shown by the group m score on the scale measuring for locus of control, Inner-Directed Scale.

The major null hypotheses were in two categories: (1) There will be no difference in each statistical group's pre- and post-test mean scores on the POI measuring time competency; and, (2) There will be no difference in each statistical group's pre- and post-test mean scores on the POI measuring support.

The lengthy inventory was administered to 13 sample subjects (s) before the course began. The subjects then participated in a semi-intensive, nonresidential, T-group experience over two consecutive weekends (six days in all). Nine days after the first administration of the inventory, the POI was readministered.

The data returned significant results after a t test was performed on the two major scales. The data revealed significant changes over the two scales measuring: (1) an individual's ability to utilize time in the present as shown on the Time Competency Scale; and, (2) an individual's ability not to be overly directed by others as shown on the Inner-Directed Scale.

The probability level for the Tc Scale was approximately .02 and the α for the I Scale was between .02 and .05. The two null hypotheses were rejected at $t_{.05}$ (12 df).

Residual data are also reported.

From: "Interpersonal Relationships: U.S.A. 2000"

"Each child will learn that he
is a person of worth,
because he has unique and worthwhile capacities,
He will learn how to be
himself in a group--
to listen, but also
to speak,
to learn about himself, but also
to confront and
give feedback to others.
He will learn to be
an individual, not a faceless conformist.
He will learn, through simulations
. . . to meet many of the life problems he will
face.

Carl Rogers
JABS, 1968 (p. 274)

ACKNOWLEDGEMENTS

A. M. D. G.

A work of this sort can not be carried forth without the help of a number of associates. I am indebted to resource specialists from the College of DuPage Learning Resource Center, especially Alan O. Bergeson and Helen Lucille Edwards, who spent endless periods of their own time guiding my research.

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Service was kindly extended by Dorothy Williams and Patricia Cahill, as well as by Kathryn Brennan and Angela Bertone, of the Omega College Office staff. Needless to say, the students of the

Sociology 290 class were without doubt the most encouraging and sympathetic assistants one could possibly hope to have.

A project seems endless without encouragement from friends. Dr. Thomas J. Milleman and Alan Lanning added that dimension. It was the suggestion from the Office of Instruction that an evaluation of this sort be conducted that helped this specific design to occur. And it was the patient inspiration of Dean Carter Carroll, Omega College, that was truly needed to see this work through to its completion.

Additional thanks to Dr. Terry O'Banion who added numerous comments about the project. In no way should he or any of my friends and associates be accountable for the shortcomings of this project. That final responsibility rests with this writer.

One last person truly championed this study: Janis Reda. Without her expertise and talents, this investigation could not have been undertaken.

To all of you, a sincere thank you.

Mark R Reda

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PART I

CHAPTER I

INTRODUCTION

STATEMENT OF THE PROBLEM

This is an examination of a relatively new approach to education and college learning groups. What is to be measured is whether any behavioral change will result in subject-learners who take part in a semi-intensive, human-relations, training-group laboratory course in sociology-social psychology. The behavioral change to be measured is the level of self-actualization and the basic measurement instrument to be utilized will be a pre- and postadministration of E.L. Shostrom's Personal Orientation Inventory (POI).

That which follows is a quasi-experimental study in applied learning theory. Some of the conditions influencing the outcome of the course design are fixed in natural home settings outside the control of the instructor-trainer.

The fundamental theoretical underpinning utilized in the learning groups is somewhat unique to traditional learning theory. The basic approach of the learning groups will be one advocated by third-force theorists and one found in third-force psychology. Such

theorists are concerned with "fully functioning persons" (to use Carl Roger's term) or "self-actualizing persons" (following A. Maslow's lead).[1]

The learning theory to be applied is housed in the gestalt concept and finds its roots in Kurt Lewin's social psychology and field theory. Its circuit is continued by such writers as Seeley in sociology as well as Rogers, Maslow and Knowles in the humanistic movement.

This study is an evaluation of one course model in sociology being taught at Omega College, a cluster within the College of DuPage (C/D), Glen Ellyn, Illinois. It is a course that is part of humanistic education and third-force theory. The course, entitled "Social Communications," adapts the T group or encounter group as a basic vehicle for approaching the student-learner. Terry O'Banion and April O'Connell write about the term "encounter," saying: "As a new philosophy and a methodology for living, this new approach to relating to each other has the possibility, we believe, of

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[1] But it is the clinical psychologists, especially those who identify themselves as humanistic, who have concerned themselves most deeply with problems of learning. The humanistic psychologists speak of themselves as 'third-force psychologists.'" Malcolm Knowles, The Adult Learner: A Neglected Species (Houston: Gulf Publishing Co., 1973), p. 30.

cementing our rapidly fragmenting society."[1] Interestingly, many third-force theorists and radical and applied sociologists are developing similar action-oriented approaches to society, moving from traditional sociological positions of value-free noninvolvement to roles of change agentry.

This writer will attempt to respond to specific concerns about the Social Communications model, one such concern involving the degree of learning, if any, occurring in the course model. Through the research design of the study, this writer will attempt to report to the reader significant changes of measured learnings.

In essence, this work will evaluate one program at the College of DuPage for inspection by colleagues and deans. The data will be shared for continued evaluation, hopefully resulting in curriculum refinement in a relatively new area of the behavioral sciences which is outside the more traditional learning approaches.

HYPOTHESES

The procedure that is to follow in this study is statistical in type with the following hypotheses stated in the (Ho) null form:

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[1]Terry O'Banion and April O'Connell, The Shared Journey: An Introduction to Encounter (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1970), p. xii.

Ho--Time Competent Scale (Tc)

1. There will be no difference in each statistical group's pre- and post-test mean (m) scores on the POI measuring time competency (Tc Scale).

Ho--Inner-Directed Scale (I)

2. There will be no difference in each statistical group's pre- and post-test mean (m) scores on the POI measuring the support (I Scale).

TABLE I

The Null Hypothesis

$H_o : m_1 = m_2$

The preceeding two hypotheses have been expressed in the null form with each alternate hypothesis (H_1) being that there will be a significant difference in postexamination scores.

H_1--Tc Scale

3. There will be a difference on each statistical group's pre- and post-test mean (m) scores measuring time competency (Tc Scale).

H_1--I Scale

4. There will be a difference on each statistical group's pre- and post-test mean (m) scores measuring support.

TABLE II

The Alternate Hypothesis

$H_1 : \underline{m}_1 \neq \underline{m}_2$

Before this paper is shifted into an examination called the "Background" to this project, a brief discussion is in order so that a clearer understanding regarding the nature of the statistical hypotheses will occur as well as an appreciation for the construction of the research question.

In a discussion of behavioral science and statistics taken from a larger work, The Handbook of General Psychology, A. Binder calls the attention of the researcher to three phases: "(1) experimentation or environmental evaluation and measurement, (2) statistical analysis, and (3) interpretation."[1] Professor Binder writes that the middle phase is only a bridge between phases one and three and has no independent status.

In the first phase concerning environmental analysis, Binder notes that the researcher "makes his observations"[2] which usually

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[1]Arnold Binder, "The Statistical Method," Handbook of General Psychology, ed. Benjemin B. Wolman (New Jersey: Prentice-Hall, Inc., 1973), p. 50.

[2]Ibid.

result in numbers collections and operations of measurements: "the observations sometimes lead to classifications that are not obviously numerical."[1] However, Binder notes that the results can be given by an arrangement of numerals and cites an illustration which is a basic and useful model for making decisions about the two pre- and postpopulation scores found in the POI:

> For example, suppose patients in a hospital are classified as schizophrenic or not schizophrenic. If one assigns the numeral 1 to schizophrenics and 0 to non-schizophrenics, then the numerical average is equal to the proportion of schizophrenics in a group. One can then perform the tests involving means and make meaningful interpretations in terms of relative frequencies.[2]

The sample mean post-test score will be compared to the pre-test score. The difference in scores will be examined in terms of the t test for correlated means.

ORIENTATION OF THE PAPER

This report is in two parts: Part I includes the first three chapters; Part II includes Chapters IV through V. Chapter I briefly describes the research problem and the theoretical underpinning of the applied research effort, followed by a deliniation of

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[1] Ibid.

[2] Ibid.

the hypotheses. The hypotheses are stated in the null form connoting testing for participant behavioral change as measured by a mean difference score on a pre- and postadministered inventory. In an attempt to be clear about language, the section to follow lists important terms and their definitions as found in this study.

Chapter II reviews some of the literature in learning theory as it relates to this topic. Before a treatment of the research literature occurs, the background for this study is shared: this section attempts to show the broad need that exists inside one institution for an investigation via the learning theory perspective of a specific human-relations course approach. The literature review attempts to unite learning theory through the gestalt school which houses the field theory and which in turn has sheltered Lewin's topological and vector theories of psychology. From Lewin's writings have come concepts that bring together this one wing of the behavioral sciences with the third-force theorists, particularly Maslow. With the approaches of these third-force theorists the literature is linked to humanistic psychology and sociology. The chapter continues with a discussion of Maslow's concept of self-actualization and a discussion of the POI used for measuring this concept. The POI literature is finally reviewed as it pertains to the Social Communications course under examination.

The work shifts to Chapter III which presents the "Procedures and Methodology" area of investigation. It begins with a restatement of the question and quickly discusses the study in terms of its limitations, especially the quasi-experimental controls affecting the data. For any study of this kind to proceed, basic assumptions are needed to be shared before the data can be properly reviewed. Next, a discussion is written regarding "Procedures for Collecting Data." It begins with a description of the pilot or prototype design and follows with a description of the resulting final design from which the actual sample is taken. The POI instrument, which was used to measure the scores of the two pre- and postsamples, and the resulting data are reviewed. The chapter concludes with "Procedures for Treating the Data."

Chapter IV contains the actual group mean data scores from the POI pre- and postsamples. Residual data resulting from the subscales and ratio scores is also reported in this chapter.

The last chapter, Chapter V, briefly reviews the entire study and then continues with a discussion of the significance of this work for the College of DuPage and some specific outcomes. At this point the limitations of the study are again reconstructed as new sign posts for the reader to heed. Chapter V ends with a

recommendation for further studies, with the last paragraph reviewing the Ho in terms of future directions.

DEFINITION OF TERMS

In an attempt to be clear about the language used in this research effort and to communicate accurately the research findings, this section will list some terms and their meanings as used by the writer of this report.

1. POI: Personal Orientation Inventory, designed by a third-force theorist, E.L. Shostrom, based upon the concepts of A. Maslow containing 150 paired questions with results reported on two major scales.

2. Level of self-actualization: that which is measured primarily by the two major scales of the POI, time competency and inner-directedness.

3. Third force: a movement in the behavioral sciences concerned with the study and development of fully-functioning persons.

5. Omega College: a cluster college within the College of DuPage containing 1800 (almost exclusively) liberal arts students.

6. T group and encounter group: a small group of between eight and 14 participants focused on "here and now" issues and locus of control within one's own culture. It is unstructured, with

a climate of free expression and open communication, needing extensive time to develop. It was first initiated by the Massachusetts Institute of Technology and the NTL Institute for Applied Behavioral Science in 1946-47 by Kurt Lewin, Kenneth Benne, L. Bradford, Ronald Lippitt and Morton Deutsch.

7. The time-competent person (as on the Tc Scale): one who lives primarily in the present ("here and now") with full awareness, contact, and full-feel reactivity.

8. The time-incompetent person (as on the Ti Scale): referring to a person behaving as though he or she is living in the future or past ("there and then").

9. The inner-directed person (as on the I Scale): referring to an individual whose source of direction is inner-guided by internal rather than external influences (or controlled from within).

10. Locus of control: a trait dimension hypothesized by J. Rotter which reflects the degree to which people attribute events to their own actions or to circumstances beyond their control.

11. Pragnanz: a law of equilibrium, compact but significant.

12. "Here and now": that which occupies the present, in the space of life occupied by this moment.

13. Group: two or more interdependent and interacting individuals on one or more dimensions who are aware of the existence

of the group and their membership in it.

14. Social interaction: the content and form of what people are doing with one another; the "what" and "how" of action.

15. Practicum: an action-oriented approach to research based upon a nontraditional research style.

16. Gestalt psychology: Knowles states this is "within the family of field theories--theories which propose that the total pattern or field of forces, stimuli, or events determine learning."[1]

17. Phenomenologists: theorists concerned with the study of the progressive development of the person. Knowles sees them (among others) as individuals who acknowledge self-actualization as a driving force motivating man's behavior.[2]

18. Humanistic sociology: a perspective that would understand man from a holistic view, seeing man not in a vacuum (the individual apart from society) but seeing man as living in action (the creation of self as a process developed through interaction). "A humanistic sociology would study the degree to which specific values and

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[1] Malcolm Knowles, The Adult Learner: A Neglected Species (Houston: Gulf Publishing Co., 1973), p. 25.

[2] Ibid.

institutions based on those values, facilitate or hinder the 'good' society."[1]

19. Semi-intensive group: a T group that meets for roughly 55 hours over a six-day period in a nonresidential format. A major characteristic is lengthy extensions of time outside the physical classroom where the group meets as opposed to traditional 90 minute in-class periods. Although this definition is unique to this study, the semi-intensive group must be contrasted with the more intensive live-in, 10-day laboratories held by NTL at Bethel, Maine, or the once-a-week programs of 100 minutes duration for 10 weeks as is now being attempted by some schools.

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[1]John F. Glass and John R. Staude, editors, Humanistic Society: Today's Challenge to Sociology (Pacific Palisaides, Calif.: Goodyear Publishing Co., 1972), pp. 8-9.

CHAPTER II

THE BACKGROUND AND SIGNIFICANCE OF THE STUDY

CHAPTER INTRODUCTION

The Need for Background

This study is an attempt to initiate a number of footbridges between diverse academic-practioner populations and the sphere of students that they influence. A most certain comfort exists for individuals in the teaching of college courses and for individuals in the study of college courses when those courses contain substantial amounts of material in the cognitive domain of learning. Low-level objectives to be measured (such as knowledge for recall) can be identified and tested with a high degree of certainty.[1] Yet, higher-level cognitive objectives become increasingly difficult to measure, and objectives in the affective domain are seldom attempted for controlled measurement (if recognized at all) beyond the basic level (such as "receiving--attending". . . . 1.0 level).[2]

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[1]On a scale from 1.0 to 6.0 such an objective has been rated as a 1.0 level objective; see Benjamin S. Bloom et al., Taxonomy of Educational Objectives, Handbook I: Cognitive Domain (New York: David McKay Co., 1956).

[2]Barton R. Herrscher, Implementing Individualized Instruction (Houston, Texas: ArChem Company Publishers, 1971), p. 29.

The acquisition of information and the mastery of thought through the cognitive and/or the affective domain, although related and important, are not central for the purpose of this study. What is important is to communicate to colleagues (teacher and learner alike) the ideas that:

1. A humanistic movement exists in the social and behavioral sciences which is beginning to foster academically accredited courses existing primarily, although not exclusively, in the affective domain of learning; and,

2. This movement must and can be measured.

A practioner-theoretician must demonstrate in the social-behavioral sciences that learning programs in the affective domain (such as those in human relations training) are based on a solid academic foundation. John Losak writes:

> In theory, instruction should be derived from learning principles. In practice, education is far from achieving this goal because of the complex and often contradictory demands presently made of education.[1]

Dr. Losak continues by writing of the pressures on teachers which are societally based and which must be considered if the teacher is able to initiate changes using learning principles as a

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[1] John Losak, Learning Theory and Application (Ft. Lauderdale, Fla.: Nova University Press, 1974), p. 38.

foundation.[1]

In essence, the first line of action demands that academicians be made aware of the theoretical underpinning of a specific program, i.e. the Social Communications class. The teacher-researcher would then share research information reporting the pluses and minuses of such ventures in education. He or she may be covertly, if not overtly, aware of the "outside" societal pressures on the program and aware that these pressures still exist for all who are involved in the educational enterprise. These pressures create a sort of accountability which, if properly administered or applied, can truly be healthy for higher education.

A brief sharing of theoretical perspectives and data about a human relations-social psychological group course is, hopefully, the first step in creating an academic climate of scholarly debate on a learning approach. Even when a researcher has valid data to support a thesis, to be overly optimistic might be premature when one considers this sobering note written by Losak:

> In addition, conflicting philosophies of education, more or less explicitly stated, frequently militate against broad application of experimental findings.[2] (Italics mine.)

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[1] Ibid.

[2] Ibid.

THE RESEARCH OF SIGNIFICANT LITERATURE

Gestalt and Field Theory Beginnings

The learning theory to be applied is housed in the gestalt concept and finds its roots in Kurt Lewin's field theory, topological and vector psychology and social psychology.

Hilgard and Bower write in a third edition of Theories of Learning that "gestalt psychologists can be fairly said to have been only moderately interested in learning. This does not mean that their few experiments are without significance; it means only that they have considered the problems of learning secondary to the problems of perception."[1]

Gestalt psychology has taken the general point of view that the laws of organization which apply to perception can be equally applied to learning.[1] A major concern of this school of thought was the degree of influence that experiences from the past would have on present performance. "Because modification by and through experience is part of the very definition of learning, the gestalt attitude toward experience is important."[3] The gestalteans explain

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[1]Ernest R. Hilgard and Gordon H. Bower, Theories of Learning (New York: Meredith Publishing Co., 1966), 3rd ed., p. 238.

[2]Ibid., p. 235.

[3]Ibid., p. 236.

past experience through a complex "doctrine of traces." This doctrine is able to represent events that already occurred to the present.

> The essential features of the theory are: (1) a trace is assumed which persists from a prior experience, so that it represents the past in the present; (2) a present process is also posited, one which can select, reactivate, or in some manner communicate with the trace; and, (3) there is a resulting new process of recall or recognition.[1]

For the trace system to function a concept must be interjected explaining a process that occurs. That concept is the law of Pragnanz,[2] the "good" gestalt. Traces of memory exist to help solve a problem in the present, yet the problem solving undergoes "changes of a systematic sort and it will be evidence against a theory of mere connections weakening in time or inhibited by new learning."[3] Such changes as leveling and sharpening occur and perceived figures are reporduced differently from the original model (For example: a small circle with breaks in it will become complete and/or more symmetrical in a drawing from one's memory;

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[1] Ibid., p. 237.

[2] Pragnanz is a law of equilibrium; a compactfullness; "Knapp und doch vielsagend"; compact but significant.

[3] Hilgard and Bower, p. 237.

when a saw-toothed figure is reproduced it may have deeper and more prominent teeth.)

In the chapter entitled "Theories of Learning Based on Studies of Animals and Children," Malcolm Knowles writes that most classifications place gestalt psychology "within the family of field theories, theories which propose that the total pattern or field of forces, stimuli, or events determine learning."[1] "The field theorists believe it more profitable to be concerned with the present."[2] This theory group does not deny the past that has made the individual the way he or she is, but "from a scientific point of view," the field theorist believes that it is better to study the individual as the person he or she is now, a person made up of those accumulated experiences. Individuals should not concern themselves with what was done when "x" or "y" subject[3] was learned. "The field psychologist points out, however, that even with appropriate past experience the organism may not solve the problem if it is presented one way and may solve it if it is presented in another way."[4]

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[1] Knowles, p. 25.

[2] Ernest Hilgard, Theories of Learning (New York: Appleton-Century-Crofts, Inc., 1948), 1st ed., p. 16.

[3] Ibid.

[4] Ibid., p. 17.

Kurt Lewin's Influence

An applied behavioral scientist, Kurt Lewin, used principles first expounded by the gestalt school that he developed into a "topological theory of human motivation.[1] Central to this field theory[2] was the concept of 'life space'--all the persons, events, ideas, needs and so on that may be influencing an individual at a given point in time."[3]

> Although a member of the Berlin gestalt group, Kurt Lewin early began to break new ground, especially in studies of motivation. Lewin's is not, strictly speaking, a psychology of learning. Only a small fraction of his own work and that of his students is devoted to problems of learning, but his conceptions of behavioral dynamics are critical of many current beliefs about learning. While the formulations are not presented as a theory of learning, they are relevant to such a theory.[4]

In the Knowles chapter of "Theories of Learning..." the author notes that "Kurt Lewin developed what he referred to specifically as a field theory."[5]

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[1] Psychology 73/74 Encyclopedia (Connecticut: Dushkin Publishing Group, Inc., 1973), p. 147

[2] Hilgard, 1948, p. 215.

[3] Psychology 73/74 Encyclopedia, p. 147.

[4] Hilgard, 1948, p. 209.

[5] Knowles, p. 25.

An Introductory Literature of Learning Theory

The thread that ties together the learning theory cited thus far is woven together in the following way: The gestalt school houses the field theory, which in turn produced Lewin's topological and vector psychology with its concept of life space.

> Lewin conceptualized each individual as existing in a life space in which many forces are operating. The life space includes features of the environment to which the individual is reacting--material objects he encounters and manipulates, people he meets, and his private thoughts, tensions, goals, and fantasies. Behavior is the product of the interplay of these forces, the direction and relative strength of which can be portrayed by the geometry of vectors. Learning occurs as a result of a change in cognitive structures produced by changes in two types of forces: (1) change in the structure of the cognitive field itself, or (2) change in the internal needs or motivation of the individual. Because of its emphasis on the immediate field of forces, field theory places more emphasis on motivation than any of the preceding learning theories. Lewin felt that success was a more potent motivating force than reward, and gave attention to the concepts of ego-involvement and level of aspiration as forces affecting success.[1]

Knowles points to the gestaltists and particularly Lewin's writing as the relevant work that ties together learning theory, humanistic, and third-force theory.[2]

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[1] Knowles, p. 25.

[2] Ibid.

It is this nonmetric geometry of spaces (topology), a system of mathematical logic, that gives learning theory concepts of "inside" and "outside" and "boundary." Hilgard notes that "sociologists have long talked of 'in groups' and 'out groups.'"[1] It is in such a conceptual way that Lewin is using space here.[2]

Vectors are also borrowed from mathematics by Lewin. Vectors are usually illustrated by arrows and line lengths connoting amount of force being exerted by the measured length of the line. Conflict theory and conflict resolution as found in group dynamics lend themselves to vector application.

Interestingly, the life space theme in Lewin's work is also found in the writing of John Seeley's thoughts of a "society of selves."[3]

Hilgard describes Kurt Lewin's concept of life space:

> The conception of life space is a plausible one. It signifies that two people walking down the same street are going different places, and worlds in which they are walking are to some extent different worlds.[4]

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[1]Hilgard, 1948, p. 214.

[2]Ibid.

[3]John Seeley, "Social Psychology, Self and Society," Journal of Applied Behavioral Science (Vol. 1, No. 4, 1965), p. 316.

[4]Ibid., p. 215.

It is with the life space concept that hints of self-actualization occur. Lewin's concept of life space touches upon the ideas of reality-unreality. When the life space corresponds to the real world in which the person interacts, he is said to be in touch with reality.[1] The concept also has a dimension of a "time perspective"[2] which is the exact factor being measured by the POI, a condition of Shostrom's self-actualization test.

It is at this point in the learning theory literature that the reader finds the most fundamental concept of the POI test and the T group process coming together with the writings of Kurt Lewin. In the argot of the T-group language, the concept is referred to as "here and now." In the POI test it is called "time competency," and Lewin refers to this as "present life space."

> Perhaps even more forcefully than his gestalt colleagues, Lewin insisted that behavior depends upon the present, not upon the past or the future. Past events, like future events, do not exist now, and therefore in his sense, cannot have effects now. While past psychological fields are part of the origin of the present field, their relationship to the present is so indirect that their explanatory value is slight.[3]

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[1] Ibid., p. 316

[2] Ibid., p. 317. Also see Larry K. Frank, "Time Perspectives," Journal of Social Philosophy (Vol. 4, 1939).

[3] Hilgard, 1948, p. 317.

Lewin was cognizant of his neglect of learning and takes a strong stance in regard to this neglect. "He says that learning (i.e. the influence of the past on the present) has been much over-emphasized, a reaction against earlier prescientific teleology (i.e. the influence of the future on the present).[1 & 2]

A further connection between gestalt, learning theory and the T group via Kurt Lewin is seen in a Knowles' analysis. He writes: "Since some of the strongest forces affecting an individual's psychological field are other people, Lewin became greatly interested in group and institutional dynamics; and, as we shall see later, it is in this dimension of education that his strongest influence has been felt."[3] Finally, much of this literature regarding learning theory and gestalt which gives birth to new areas of study is drawn together. "The most recent development in the field of theoretical approach has appeared under several labels: phenomenological

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[1]Hilgard, 1948, p. 217.

[2]An interesting note in the third edition of Hilgard and Bower: "The chapter on Kurt Lewin has been dropped because of his views on learning which have not been sufficiently influential in recent years to justify this attention to them in context of learning theory... Lewin's views are currently very much alive in social psychology."

[3]Knowles, p. 25.

psychology, perceptual psychology, humanistic psychology, and third-force psychology."[1]

The Radical Sociologists

John Staude writes in his co-penned work, Humanistic Society, of the new wave of younger sociologists who are now probing the routine ground of everyday activities[2] and notes that their works have taken on various names: ethnomethodology, neo-symbolic interactionism (Erving Goffman), the sociology of the absurd, phenomenological sociology (George Psathas), existential sociology (Edward Tiryakian), and humanistic sociology. According to Staude this new wave in the social and behavioral sciences has now confronted the established thoughts of Max Weber and his insistence on objectivity in the social sciences and "value neutrality" in social research.

Concepts like "closure" from Kofka's more general law of prägnanz are being fostered by these new sociologists. John Losak

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[1]Knowles, p. 26.

[2]John R. Staude, "The Theoretical Foundations of Humanistic Sociology," Humanistic Society: Today's Challenge to Sociology, ed. John F. Glass and John R. Staude (Pacific Palisaides, Calif.: Goodyear Publishing Co., 1972), p. 264.

defines pragnanz as the tendency to good form perception.[1] Ethnomethodologists study not simply action but also the setting in which action occurs or the "grounds" of action.[2] When that setting is explored, the routine activity of the human encounter, the taken-for-granted activity which contains the unspoken meaning or assumed activity, is engaged in or completed like broken dots connected in the mind to create the image of a straight or solid line.[3]

Staude goes back to the writings and ideas of Harold Garfinkel when he notes what an ethnomethodologist might ask:

> How is it that people assume that if they say 'good morning' to me, I will say 'good morning' to them? Members of this school insist on the fact that the so called reality of everyday life is actually a social construction, a world of shared meanings which men tacitly agree not to question in order to carry on their daily business.[4]

With this writing as just one example among many, a radicalizing school of sociology has come about ushering in new attempts at a beginning theory which sound amazingly similar to gestaltist

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[1] Losak, p. 17.

[2] Staude, pp. 264-265.

[3] Losak, p. 17

[4] Staude, p. 264.

views. Verbiage used by both theories, such as "grounds and fields of action," are sure indicators of this connection. The social phenomenology of Max Scheler refers to no "inner" or "outer" world, just "my world as it presents itself in my awareness process."[1] It is at this point that Scheler refers to the "here and now." Such concepts of time amazingly resemble the works of Maslow and Shostrom as they examine the actor becoming more time competent and inner-directed.

In a departure from traditional formats, The American Sociologist dedicated half of an issue to a section entitled "Debate," which was an exchange solicited and printed between five sociologists, one being American Sociological Association President, Professor Lewis Coser, regarding his keynote convention address that focused attention upon ethnomethodology. In defense of the approach, Donald Zimmerman writes that critics simply fail "to grasp the distinction between the content of social interaction as it is known to the participatns or to the conventional sociological observer, on the one hand, and, on the other, the form of social interaction that can be seen most clearly only when one suspends concern for what people are doing and seeks to describe how they

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[1] Ibid.

are doing it."[1] This contrast illustrates one difference between ethnomethodological and conventional sociology. It is precisely that "form" or "how" which unites ethnomethodology and the training process of the T group that is found in the Social Communications course of this study.[2]

A Brief Capsulation

In understanding this laboratory course, Sociology 290, Social Communications, it is necessary to see its origins in terms of the basic behavioral science theory. The foundation of the approach utilized in Sociology 290 is in gestalt theory and field theory. Its development is continued by Kurt Lewin, who this writer believes to be a major advocate through his work in vector and topological psychology. A fundamental thought to all this is the concept of life space and Lewin's insistance on Larry K. Frank's "time competency" or "here and now." The concept of time competency is also a major concern of the most human of the third-force theorists, A. Maslow. It is Maslow's concept of time that is measured in the

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[1]Donald Zimmerman, "Five Sociologists in Search of Consensus: An Exchange on Coser's 'Two Methods in Search of a Substance'--Ethnomethodologists--A Reply to Professor Coser," The American Sociologist (Vol. 11, No. 1, Feb., 1976).

[2]Ibid.

POI, an instrument designed to understand self-actualization in individuals and serve as an instrument to generally measure positive mental health.[1] It is E. Shostrom's POI that is utilized to measure change in the participants of Sociology 290.

Maslow as a Focus

Shostrom's POI has stimulated a wave of research into Reisman's, Rogers', Pearls' and Maslow's humanistic concepts.[2] The POI consists of questions (value judgements) reflecting behavior that is seen to be of importance in the development of the self-actualizing individual.[3]

Abraham H. Maslow writes in his last manuscript (which was published posthumously) a set of questions that gives the reader quick insight into this paper's area of concern.

> What does one do when he self-actualizes? Does he grit his teeth and squeeze? What does self-actualization mean in terms of actual behavior, actual procedure?[4]

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[1] Robert R. Knapp, The Measurement of Self-Actualization and Its Theoretical Implications: A Report of Research Based on the Personal Orientation Inventory (POI) (San Diego: Educational and Industrial Testing Service, 1971), p. 1.

[2] Ibid., p. 2.

[3] Ibid., p. 3.

[4] Abraham H. Maslow, The Farther Reaches of Human Nature (New York: The Viking Press, 1971), p. 45.

In answer to these questions Maslow cites eight ways in which one self-actualizes. First, it means to experience totally, to go at a moment with full absorption, to forget shyness and "to go at it 'whole hog'", to fully throw oneself into experiencing a moment. "The key word for this is 'selflessly,' and our youngsters suffer from too little selflessness and too much self-consciousness, self-awareness."[1]

Second, self-actualization is an on-going process of making choices, choices that are growth steps toward "progression" or "regression." The kinds of decisions an individual makes daily are movements either toward being afraid, toward safety and toward defense or, on the other side, decisions that are movements toward growth choices away from safety and defense.

Third, Maslow speaks of the self and emphasizes that the subject is not "clay" but a human being with a temperament and a self that must emerge. Maslow stresses that for movement toward self-actualization, a "listening to the impulse voices" must occur. "Most of us, most of the time (and especially does this apply to children, young people), listen not to ourselves but to Mommy's introjected voice or Daddy's voice or to the voice of the

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[1]Ibid.

establishment, or the elders of authority, or of tradition."[1] There are times, according to Maslow, that man must look to the "supreme court" inside himself.

As a fourth way in which one can self-actualize, Maslow sets down:

> Frequently, when we are in doubt we are not honest. Looking within oneself for many of the answers implies taking responsibility. This matter of responsibility has been little studied. Yet it is an almost tangible part of psychotherapy.[2]

Fifth, Maslow challenges the individual to dare to be different a nonconformist, unpopular as opposed to being dishonest with one's conversations. "To be courageous rather than afraid is another version of the same thing."[3]

Sixth, self-actualization is both an on-going process and an end product. It means using one's gifts, i.e. intelligence, and going through a process of study to do well what one wants to accomplish.

A seventh step toward self-actualization, according to Maslow, is to permit the person to set up moments when he or she can be "surprised by joy," a transient moment for a peak experience. In

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[1] Ibid., p. 46.

[2] Ibid.

[3] Ibid., p. 47.

these moments one can discover false notions of self, and this discovery can lead the person to an encountering of true potentialities.

An eighth step is identifying one's own hidden areas, one's own defenses, "opening oneself up to himself."[1] Maslow states that after the defenses are registered, one can find the courage to give them up. Such a giving up is painful since defenses have usually been erected to hide the unpleasant.[2]

Finally, the brief outline of the eight issues describing self-actualization by one of the major spokesmen of the humanistic or third-force psychologists becomes crystalized when Maslow writes:

> Put all these points together, and we see that self-actualization is not a matter of one great moment. It is not true that on Thursday at four o'clock the trumpet blows and one steps into the pantheon forever and altogether. Self-actualization is a matter of degree, of little accessions accumulated one by one. Too often our clients are inclined to wait for some kind of inspiration to strike so that they can say, 'At 3:23 on this Thursday I became self-actualized!' People selected as self-actualizing subjects, people who fit the criteria, go about it in these little ways. They listen to their own voices; they take responsibility; they are honest; and they work hard. They find out who they are and what they are, not only in terms of their mission in life, but also in terms of the way their feet hurt when they wear such and such a pair of shoes and whether they do or do not

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[1] Ibid., p. 47

[2] Ibid., pp. 48-49.

like eggplant or stay up all night if they drink too much beer. All this is what the real self means. They find their own biological natures, their congenital natures, which are irreversible or difficult to change.[1]

POI RESEARCH

Everett Shostrom writes about Maslow's concept of self-actualization and the person who is attempting to be more fully functioning, a person living a life that is enriched beyone the average individual's life. He references Carl Rogers' major texts, Client-Centered Therapy and On Becoming a Person, as two outstanding works that also reflect the same idea. Shostrom continues by writing that many in the therapeutic community "have felt the need for a comprehensive measure of values and behavior that is seen to be of importance in development of self-actualization."[2] He states that the POI was created to meet this need.

The bibliography surrounding the use of the POI is enormous. Ninety-six articles have been published and 96 dissertations, papers and unpublished articles have also been indexed as of March, 1973.

Ibid., p. 50.

Everett L. Shostrom, EdITS Manual for the Personal Orientation Inventory (POI): An Inventory for the Measurement of Self-Actualization (San Diego: Educational and Industrial Testing Service, 1966), p. 5.

A major attraction has been that the inventory can be employed in a manner that shifts a therapist-patient focus to the "client's level of positive mental health."[1] It is with this added dimension in focus that a perusial of the research literature will clearly show the length and breadth of use to which this feedback instrument has been applied.

The POI has been used in clinical studies, counseling studies (i.e. underachievement and grade-point average studies), studies of faking and response sets, correlational studies, factorial studies, reliability and overall measures of self-actualization, as well as "results from populations of special interest (i.e. teachers, clergymen, nurses, adolescents, delinquent-felon populations and alcoholics)."[2] Yet, the area of major interest and the limits of this project force the literature review to concentrate on those POI works that directly relate to "sensitivity training and marathon-group performance."[3]

Gary Cooper writes that two primary research strategies have been used in reporting evaluative outcomes from T-group training.

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[1] Ibid.

[2] Knapp, pp. 2-16.

[3] Ibid.

The first strategy uses..."measures related to the expected outcomes or using a wide variety of measures for the purpose of detecting whatever changes do in fact occur, expected or not (Smith, 1969)."[1] The second strategy has been more widely used..."since there have been few measures available for assessing the kinds of attributes associated with T-group training, particularly elements of self-actualization."[2] Cooper continues by attesting that a recent development by Shostrom now provides measures of various aspects of self-actualization, yet "it has been used almost exclusively in clinical settings."[3] For a more detailed review of this part of the research literature the work, "T-group Training: Before and After," should be inspected.[4]

POI Research and the T Group

In a special research report by Robert Knapp, nine studies that are reviewed touch upon sensitivity training, T groups, marathon

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[1] Gary L. Cooper, "T-group Training and Self-Actualization," Psychological Reports (Vol. 28, 1971), p. 391. (Also note the Smith reference to P.B. Smith, "Improving Skills in Working with People in the T Group" (London: Department of Employment and Productivity, 1969).

[2] Ibid.,

[3] Ibid.

[4] Gary L. Cooper and L.L. Mangham, "T-group Training: Before and After," Journal of Management Studies (1970), pp. 224-239.

groups and the Personal Orientation Inventory. The first of these works cited originally appeared in the Journal of Counseling Psychology, (1970), by J.F. Guinan and M.L. Foulds entitled "Marathon Groups: Facilitatory of Personal Growth?" The abstracted findings reported "changes on the POI scale scores following a marathon group experience."[1] The population was classified as relatively "normal" college students who volunteered for a 30-hour weekend marathon experience. The results were compared with a control sample of volunteers. All 12 mean POI scores for the experimental group changed in a positive direction with seven of the 12 scores reaching significance. Those significant scores were on scales I, Ex, Fr, S, Sa, A and C. (No change was noted on the second major scale, Tc.) The data was reported comparing group pre- and postexperimental scores.

An additory observation of the study showed that the authors found that students volunteering for the experiment (a personal growth experience-marathon group) are depicted as less self-actualized, more other directed, less spontaneous, having lower self-regard and self-acceptance and having difficulty (to a greater degree than the control group) in establishing interpersonal relationships.

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[1] Knapp, p. 7.

Robert Knapp writes about a 1968 study conducted by S.A. Culbert, J.V. Clark and H.K. Bobele. They report in the Journal of Counseling Psychology that university students whose POI scores are lower than average (as norm referenced) at the beginning of a sensitivity-training experience resulted in "significantly higher POI scores on four scales: I, S, Sy, and C."[1] (Again no change could be noted on the Tc Scale.) Culbert, Clark and Bobele also report that with another group holding high above-average self-actualizing scores, no significant change occurred although 10 of the 12 changes favored the negative direction. On this data the statement was made that "initial level [s] of self-actualization as measured by the POI would appear to be an important consideration in studies of change resulting from various group-training techniques."[2]

The Knapp monograph continues by reporting on a 1969 year-long project under Title III ESEA, by the Overton County Board of Education, Livingston, Tennessee. The project report by J.N. Flanders states that significant change toward self-actualization for 90 teachers occurred in a year-long sensitivity-training program.

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[1] S.A. Culbert, J.V. Clark and H.K. Bobele, "Measures of Change Toward Self-Actualization in Two Sensitivity Training Groups," Journal of Counseling Psychology (Vol. 15), 1968, pp. 53-57.

[2] Knapp, p. 7.

Changes between the pre- and post-training administrations of the POI were recorded on eight of 12 scales for the educators who participated.

In the Journal of Applied Behavioral Science the work of Rueveni, Swift and Bell shows increases in POI scores for unique population: 13 mental health workers and community workers who attended a 9-week training program. "The T groups focused on (a) teamwork, (b) interpersonal communication, (c) clarification of roles, and (d) provision of a context for learning from the variety of experiences in the participants' daily work."[1]

The results of pre- and postscores on the POI resulted in an increase in the measure on the Tc Scale for eight of the 12 students and for students in inner-directedness, the I Scale. Increases were also measured on the Ex and S scales for 12 of the 13 students measured. A majority of the students were reported to have increased on C, Sy, A, Nc, Sa and Fr scales. Although the Rueveni et. al. report refers to the training program as a T group, the group only met for two hours once a week with only one hour of the two being a "microlab, which focused on the process of

[1]Uri Reuveni, Marshall Swift and Albert A. Bell, II, "Sensitivity Training: Its Impact on Mental Health Workers," The Journal of Applied Behavioral Science (Vol. 5, No. 4), 1969, p. 600.

communication and interaction."[1]

W. Brendan Reddy placed 72 subjects into six basic HRST groups. Three groups met in a 10-day intensive residential laboratory, and three groups met in a two-and-one-half hour ten-week laboratory. The basic laboratory approach followed a NTL model for human-relations, sensitivity-training groups. Data was collected through the correlation of the pre- and post-POI and William Schutz's FIRO-B. It was found that a variable existed between intensive and nonintensive group composition. But a more crucial variable was the affection variable: greater POI results occurred in those participants whose FIRO-B scores were in opposition to the group compatibility mean. In other words, if the group mean on the FIRO-B suggested closeness, the member's score that deviated from the mean toward avoidance made the greater gain toward self-actualization. The Reedy study[2] seems to support the Harrison and Lubin studies which suggested that learning groups be compared in such a way to promote elements of support and confrontation in order to

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[1] Ibid., p. 601.

[2] W. Brendan Reddy, "BRIEF REPORTS I.: Interpersonal Compatibility and Self-Actualization in Sensitivity Training," The Journal of Applied Behavioral Science (Vol. 8, No. 2), 1972, pp. 237-240.

bring about maximum learning for all members of the experience.[1]

[1] Roger Harrison and Bernard Lubin, "Personal Style, Group Composition, and Learning--Part I and Part II," The Journal of Applied Behavioral Science (Vol. 1, No. 3), 1965, pp. 286-301.

CHAPTER III

PROCEDURES AND METHODOLOGY

CHAPTER INTRODUCTION

In this chapter the way in which this study has been conducted will be demonstrated. The chapter will be begun with a brief restatement of the research question, followed by a full treatment of "The Limitations of the Study." The next section, entitled "Basic Assumptions," will deal with some underlying assumptions not fully tested here but accepted for the purposes of conducting this investigation. The chapter will be continued with two major sections: (1) "Procedures for Collecting Data," containing an explanation of the prototype laboratory design and pilot test, followed by the final laboratory design with its new population source and the instrument utilized; and, (2) "Procedures for Treating the Data," containing statistical techniques for data treatment. The writer will conclude the chapter with a summary statement.

Restatement of the Question

The purpose of this study is to test for behavioral change in participants who enrolled in a basic model of a semi-intensive,

human relations training course, Social Communications, at the College of DuPage. The course objectives are in the area of third-force theory, and the course's focus is on affective learnings as assessed for the purpose of this study in E. Shostrom's POI. The two main areas to be measured by the POI are time competency (Tc) and inner-directedness (I). The measurement will take place by comparing a group mean prescore to a group mean postscore on the Tc and I scales.

LIMITATIONS OF THE STUDY

Depending on the nature of each specific study as well as the overall goal of a work, this section can be found in different places with differing levels of importance. It has been purposely placed in this chapter to emphasize the close relationship between limits and design questions.

Statistics in the Social Sciences

The social science literature warns that statistical tools used alone have a limited usefulness. Regarding this point, it must be said that a major assumption of this proposal is that statistical analysis facilitates social research. Yet, this proposal must also contain a comment regarding the limitations of statistical tools. Institutional and discipline concerns have been noted regarding the

limitations of a statistical tool in a specific setting and with a unique test. In this case the measurement of behavioral phenomena will be found in the College of DuPage's Sociology 290 class using the POI.

A major writing in the behavioral science research sector comes from Bernard S. Phillips who writes: "Behavioral scientists utilize statistics primarily in order to perform tests of significance between pairs of variables."[1] Phillips then notes that "this approach can easily degenerate into analysis without synthesis." He elaborates upon this point by showing that a "narrow interest in minute aspects" occurs while the researcher loses sight of the larger context.[2] He continues to write about the limitations of statistical testing by stating: "At its worst, a focus of analysis leads to a kind of compartmentalization of the mind--analogous to a specialization among disciplines which erects barriers to communication--which leads it to locate statistical significance but miss genuine significance."[3]

The methodological issue becomes of even greater importance when it is viewed in regard to the specific nature of this study.

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[1] Bernard S. Phillips, Social Research Strategy and Tactics (New York: The Macmillan Co., 1966), 2nd ed., p. 322.

[2] Ibid.

[3] Ibid.

"The humanistic social scientist argues that the data of the social sciences is qualitatively different from those of the natural sciences, and that very different methods must be employed to study social reality."[1]

Limits of Controls

This study is an applied research project, an approach that has built-in limitations which are accepted here for the purpose of gaining advantages from an action-oriented approach to research. For a moment it may be appropriate to refer to Fredrick Goodman's thoughts on applied research, particularly on the word "practicum":

> Here is a term which conjures up a very specialized existence half way between the theory of school and the practice of job. It implies, I think, supervised, perhaps even collective, practice.[2]

Controling extraneous variables when applying this practicum to the job of classroom teaching is somewhat more difficult than such

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[1] Staude, p. 264.

[2] In this quote Dr. Goodman was attempting to illustrate the uniqueness of the term "practicum" for purposes different than those in this study. Yet, it still serves this study well as an authoritative clarification of a nontraditional research style. Taken from a special chapter, "The Role and Function of the Thesaurus in Education," by Dr. Fredrick Goodman, ERIC, Thesaurus of ERIC Discriptors (New York: CCM Information Corp., 1970), p. 11.

application and control in the experimental laboratory of the psychologist or in the laboratory of the natural scientist. Although it is acknowledged that a number of variables will effect the purity of the field design, the limitations and controls must, nonetheless, be related so that the reader may determine the applicability of the research to individual intellectual curiosity.

In a discussion of cause and effect, J. Simon notes that: "Nature usually does not arrange her experiments as systematically as a researcher would, and therefore, the evidence is harder to interpret."[1] The application of the T group (via the Social Communications course) has been designed to be the major independent variable, with the dependent variable being the change observed in the post-POI administration. Yet, there are a number of "natural" influences that should be cited: (1) the time lapse between the pre- and post-test; (2) the frames of reference of the respondents during the pre- and post-test that might be extraneous to the experience; and, (3) the lack of an identical control group of students that would not have exposure to the intervening independent variable of the T group.[2]

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[1] Julian L. Simon, Basic Research Methods in Social Science: The Art of Empirical Investigation (New York: Random House, 1969), p. 121.

[2] There is a POI literature referring to control group types in a general college population conducted by previous researchers, (Knapp).

A major limitation of the study is the lack of previously tested groups of similar design that could be found in the human relations literature so that a possible benchmark comparison could be attempted. Also as the course design varies from one instructor-trainer to another, it can be empirically observed that the participatory groups appear to vary from one college class group to another.

BASIC ASSUMPTIONS

The major assumption of this work is that the measures of self-actualization as found in E. Shostrom's POI are applicable to human relations sensitivity training as found in the Social Communications course at Omega College in the College of DuPage. It is believed that the two major scales (Tc and I) on the POI dealing with "here and now" and "the locus of interaction" will adequately measure the affective change hypotheses to be tested in this sociology course.

PROCEDURES FOR COLLECTING DATA

In the following chapter, Chapter IV, data resulting from this study and research design will be discussed. Before the final design can be reported, a description of the prototype laboratory design and its administration must first be viewed.

Prototype Laboratory Design

Two Social Communications courses were researched in a pilot project, both courses following the same agreed upon design model initiated by a four-person training staff that was working totally in-concert with one another. Once the staff agreed on the initial format their focus shifted to specific steps to be taken to meet the course objectives through the format design.

The format design contained two small groups. The minimum group size was eight and the maximum size was 12. One senior trainer and one co-trainer worked together in each group in an equal status position. (One obvious difference was that both co-trainers were cronologically younger and, although highly skilled, their apparent age created a stereo-typical junior identification inside the groups.)

The format design's time sequence was as follows: Friday evening, 6:30 p.m. to 11:30 p.m.; Saturday, 9:30 a.m. to 11:30 p.m.; and Sunday, 9:30 a.m. to 6:30 p.m. On the following weekend, these times were repeated except for Sunday's schedule, when the last hour was reserved for a "wrap-up" and volunteer post-POI test.

Both groups followed the same time sequences in terms of breaks, meals, starting a day and concluding an evening. Both groups would, therefore, be part of a general and larger laboratory

working toward a common set of learning goals and sharing some large-group experiences (i.e.: community lecturettes, testing newly-acquired small group learnings and skills with the members of the "other" group who would have, as planned, little personal data on the participant).

The pilot laboratory, containing two groups, was held in an off-campus location. The rationale followed the lead of social - psychological theory which suggests change would be facilitated in a short time span if the groups are isolated from back-home interruptions during each daily session.

The operational assumption was: if each group (although containing different human beings from different social conditions) were organized in a similar fashion with similarly controlled extraneous variables, the overall results could be generalized to each of these two groups in this pilot laboratory.

In the prototype class and POI test, too many conditions were left unexplained in terms of internal and face validity. Carter Good elaborates upon this general point: "As to internal validity, certain classes of extraneous variables, if not controlled in the experimental design, might produce effects confounded with the effects of the experimental stimulus."[1] While the study can not be referred to as a

purely experimental study, the Good reference[1] appears to apply in this instance. Below are some issues found in the prototype (first) study that were changed in the following and second Social Communications course reported in detail in this paper:

1. As in the first case, the two groups running simultaneously introduced too many trainer differences in each group, increasing testing difficulty.

2. The stimulus of moving from the campus was empirically reported to be a positive factor, but it also increased testing difficulty.

3. The last hour "wrap-up" and test administration schedule was clearly discussed at the beginning of the course and before student registration as part of the overall program. This reduced test anxiety and removed uneasiness about grades to be given and reduced the need to hurry through the post-POI (as was the case in the administration of the pretest). It also increased the overall N to 100 per cent participation in the POI.

4. Although the second and final laboratory design was a replica of the prototype, it was modified to include only one group

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[1] Carter V. Good, Introduction to Education Research: Methodology of Design in the Behavioral and Social Sciences (New York: Appleton-Century Croft, 1963), p. 451.

(as opposed to the prototype which contained two groups). This change in design was made because the dynamics between the two groups in the prototype could not be easily repeated and because intergroup interactions affected intragroup changes which were being measured. Therefore, in the second and final laboratory the variable of this stimuli being interjected by the interaction of two groups needed to be eliminated.

The Final Laboratory Design

The final course design that was researched in this paper through the POI instrument contained 13 participants, working together over two weekends, six days in all. One instructor-trainer served as the facilitator. No co-trainer assisted (as in the prototype) which resulted in the elimination of problems of trainers' differences.

The trainer had conducted T groups with college groups for 10 continuous years. The professionals' approach was sociological and the background training was rooted in an NTL-influenced, academic graduate curriculum. The leader-facilitator accepted the original prototype design with few modifications. (This was due to that person's inclusion at the earliest stage of this study's research.)

The course was moved back to a campus facility and this allowed for one less extraneous variable which could not be tested

for or which might influence POI administration and overall time pressure. The campus facility was a carpeted lounge designed to have the comforts of an informal home living room setting. This s etting was believed to be important because it stressed an adult, nonclassroom environment, which had a re-enforcing potential of a nonchildlike approach to learning. Malcolm Knowles writes extensively about this subject. "The physical environment requires provision for animal comforts (temperature, ventilation, easy access to refreshments and rest rooms, comfortable chairs, adequate light, good acoustics, ect.) to avoid blocks to learning."[1] Knowles continues:

> Just as we have witnessed in the decade a growing concern for the quality of our environment for living, so during the same period there has been increasing concern among educators for the quality environments for learning. From the ecological psychologists we have begun to obtain valuable information about the effects of the physical properties of environment on learning. The social psychologists have taught us much about the effects of the human environment--especially the quality of interpersonal relations.[2]

In the same work Knowles refers to the study in adult education by A. Tough which discriminates between child learners and

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[1] Knowles, p. 103.

[2] Ibid.

adult learners. Tough notes not only what and why adults learn, but how they learn:

> Through group and individual methods, many adults now set out to increase their self-insight, their awareness and sensitivity with other persons and their interpersonal competence. They learn to 'listen to themselves,' to free their body and their conversations from certain restrictions and tensions, to take a risk, to be open and congruent. Attempting to learn this sort of knowledge and skill seemed incredible to most people 20 years ago. Great changes in our conception of what people can and should set out to learn have been created by T groups, the human potential movement, humanistic psychology and transpersonal psychology.[1]

Thus, the T-group approach and the adult setting were maintained and preserved.

The POI Instrument

The Personal Orientation Inventory was designed by Everett L. Shostrom. Encouragement to construct the inventory came from Abraham Maslow and conceptual assistance and development underlying the inventory came from Frederick Perls. Other outstanding scholars involved in the instrument design are Wayne Zimmerman in statistics and George Back in the development of scale A, "Acceptance of Aggression."[2] The POI's original developmental function

[1] A. Tough, The Adult's Learning Projects (Toronto: Institute for Studies in Education, 1971), p. 42.

[2] EdITS Manual, p. 4.

was to assess the "self-actualizing person--a person who is more fully functioning and lives a more enriched life than does the average person."[1]

> The Personal Orientation Inventory (POI) was created to meet this need. The POI consists of 150 two-choice comparative value and behavior judgements. The items are scored twice, first for two basic scales of personal orientation, inner-directed support (127 items) and time competency (23 items) and second for ten subscales each of which measures a conceptually important element of self-actualization.[2]

The 10 subscales of the POI are as follows: (1) SAV Scale, self-actualizing value; (2) Ex, existentiality; (3) Fr, feeling reactivity; (4) S, spontaneity; (5) Sr, self-regard; (6) Sa, self-acceptance; (7) Nc, nature of man; (8) Sy, synergy; (9) A, acceptance of aggression; and (10) C, capacity for intimate contact.

Although the data that might result from subscales is not considered part of the two major hypotheses, it is believed to be important of the overall study and the results will be reported in a section containing "residual findings."

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[1] Ibid., p. 5.

[2] Ibid.

PROCEDURES FOR TREATING THE DATA

The data will be collected from the 13 participant's test administered at the beginning and conclusion of the Social Communications course. It will be returned in raw scores on each of the scales to be examined. The two major scales to be examined will be the Time Competency Scale (Tc) and the Inner-Directed Scale (I).

A group mean score will be calculated from the raw data on the POI pre- and post-I scale administrations. The two mean scores will be compared using the t test.

The "t test for correlated means" will be used to compare the differences between each of the pre- and postsamples.

The difference between the means $= \sigma_\Delta = \sqrt{\frac{\sigma_X^2 + \sigma_Y^2 - 2r\sigma_X\sigma_Y}{N}}$

If the pre and post-POI mean scores for the individuals in each sample on a specific scale (Tc and I) do not differ significantly, the appropriate null hypothesis (No. 1 or No. 2) will fail to be rejected and the appropriate alternate hypothesis is to be examined (No. 3 or No. 4).

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[1]The statistical package consulted was Compucorp ®#8801565A. The identifying author was Brady. The program was entitled "T Test for Correlated Means."

SUMMARY STATEMENT

This chapter restated the research question. It dealt with the limitations of the study from the viewpoint of the behavioral and social scientist. The issue of applied research and its relationship to this paper's methodological approach followed, leading into some specific and natural limitations found here. Some basic assumptions were looked at concerning the use of the POI. The procedures for collecting the data based upon the prototype and the resulting findings from that model lead to the final design and use of the POI. The section ended with the treatment discussed and statistical formula reported.

PART II

CHAPTER IV

DATA RESULTING FROM THE STUDY

CHAPTER INTRODUCTION

This chapter includes data from the t test with a calculation of the degrees of freedom, followed by the decision rules regarding the hypotheses. The results are reported as well as additional residual findings.

The t test for correlated means was used to test for the two null hypotheses and two alternate hypotheses reported in Chapter I. A pre- and post-POI were administered to the group and data was returned as measured on the two major scales: time competency (Tc) and inner-directedness (I). Each scale sample yielded data that either failed to reject or did reject the Ho in each specific case.

DATA RESULTS

Calculating the DF

The degrees of freedom (df) are calculated as follows:

df	N - 1
12	13 - 1

Decision Rules

For 12 df with a probability value(α) at .05 with the normal curve for a two-tail test ($Z\alpha$) at 1.96, the t statistic would be calculated at 2.18 or: t_{crit} 2.18. The decision rules are as follows: if t_{obs} 2.18, accept Ho; if t_{obs} 2.18, reject Ho in each case so as to reject each null hypothesis.

Data Findings

The sample mean group score on the Tc Scale from the first administration that occurred before the students participated in the Social Communications course was 16.00. The sample mean group score recorded on the Tc Scale resulting from taking the POI after the Social Communications course was 18.07. After calculation, the t-test output resulted in a t statistic of 2.608 giving a α score of .03.

The m score for the I Scale on the pre-POI was 83.23. The mean for the I Scale was 90.38. The t statistic as reported was 2.302 that yielded a α between the .05 and .02 level.

TABLE III
TWO MAJOR SCALES SUMMARIZED

	Tc Scale	I Scale
Pre m	16.00	83.23
Post m	18.07	90.38
T_{obs}	2.61	2.30
	.02>P<.05	.02>P<.05

Results

According to the decision rules, the null (Ho) hypothesis for Tc was rejected at the .05 level of significance.

According to the decision rules, the null (Ho) hypothesis for I was also rejected at the .05 level of significance

RESIDUAL DATA

Ten subscales appear on the POI. Additionally the data was collected from the pre- and postadministration and calculated to show additional output. Two additional scales showed results at less than .05 level of p: feeling reactivity and self-acceptance.

The two scales which reported results between the .10 and .05 level were spontaniety and synergy. Capacity of intimate contact and self-regard were recorded between the .20 to .10 level. Data were recorded without a hint of trend for the Ex, Nc and A scales. A full tabulation follows:

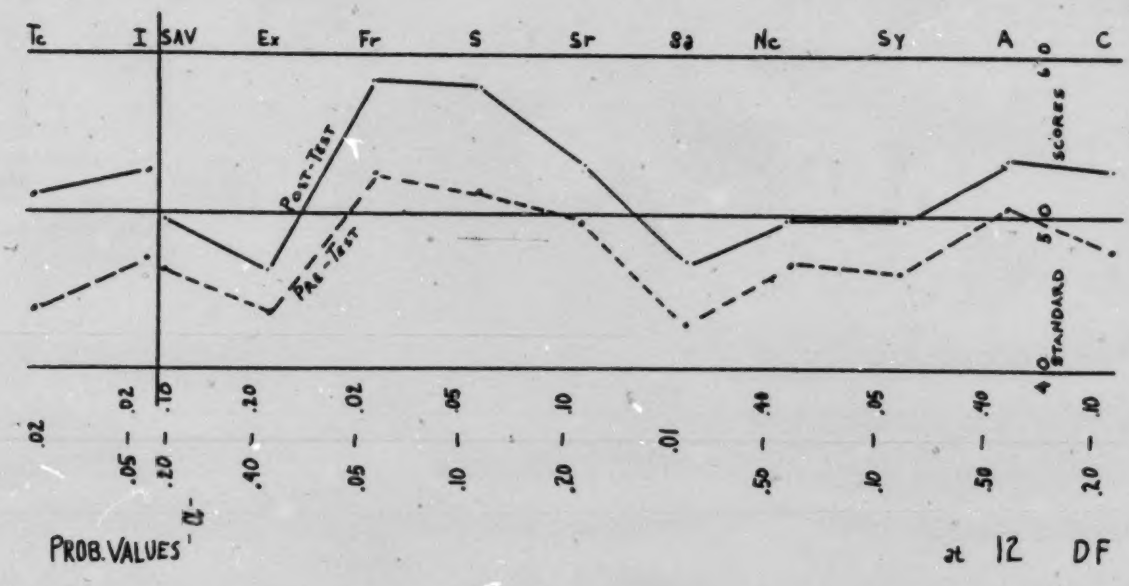
TABLE IV
P LEVELS OF SIGNIFICANCE BETWEEN PRE- AND POST-POI

Scales	$a \leq$	Scales	$a \leq$
Tc	$\leq .03$	Sr	$< .20$
I	$< .05$	Sa	$< .01$
SAV	$< .20$	Nc	$< .50$
Ex	$< .40$	Sy	$< .10$
Fr	$< .05$	A	$< .50$
S	$< .10$	C	$< .20$

The POI results have been reported traditionally over a set of scales copyrighted by EdITS in 1965. A similar, yet different, illustration is reported here for reader comparison. It shows a correlation of mean scores before the independent variable of the T-group course and after the variable was introduced.

TABLE V

GROUP MEAN SCORES



Individual Ratio Scores

Of some interest to the reader is the additional residual data from the two major scales, Tc and I. This data additionally was calculated for possible later treatment over the major factors "time" and "support." A time incompetent score was calculated from the POI test. This score was divided into itself and the time competent score, resulting in a ratio of time use and efficiency (one hour time incompetent to eight hours competent).

TABLE VI

T_i	:	T_c	Time ratio
1	:	8	Ratio is calculated as an ideal

The mean time ratio score was 1 : 4.4 at the beginning of the T group, and the postmean ratio score was 1 : 6.7 at the end of the experience.

The support ratio was calculated the same way with the ideal ratio being one to three (one part other directed to every three parts inner-directed).

TABLE VII

0	:	I	Support ratio
1	:	3	Ideal support ratio

The participants' pretest support ratio score for inner and other directedness was 1 : 2.44. The ratio score after nine days and the introduction of the independent variable was 1 : 2.77

CHAPTER FIVE

CONCLUSIONS AND IMPLICATIONS

A PREFATORIAL INTRODUCTION

Traditional learning theorists have found little room in their literature for the approach to education that has been examined in this work. Instead, they have ushered the concepts of third-force theory and humanistic sociology over to the subfield of social psychology.

This study's literature section contains a unique attempt to mesh the conceptual tenets that exist in learning theory together with the "acceptable" gestalt wing of Kurt Lewin's field theory of topological and vector psychology. Malcolm Knowles acknowledges that Lewin and the gestaltists gave birth to the concepts of life space, humanistic and third-force theory. It is the humanistic movement in psychology and sociology which ties together the writings of Maslow, Garfinkel, Psathus and newcomers like John Staude and John Glass, that finally produces the theoretical underpinning (from a learning theory perspective) for human relations training and T groups in sociology courses.

THE APPLIED WORK REVIEWED

This study attempts to examine one curriculum example of an application of third-force and humanistic theory by moving from the world of the abstract to applied research. It examines an avant garde course offering at the College of DuPage, Omega College, in undergraduate sociology curriculums entitled Social Communications (Sociology 290), which is an application of the human-relations, sensitivity-training, T-group approach with the purpose of increasing one's ability to interact in human group settings.

The inspection of this course is accomplished through the administration of an 150-question inventory designed by E. Shostrom, which is based upon the concepts set forth by a leading third-force theorist, Abraham Maslow. The inventory sets out to measure self-actualization and has been used extensively in therapy as a positive indices to examine mental health. An emerging literature is now evolving in which the POI is being used in human relations situations. The two factors measured in this practicum were: (1) behavioral change as shown by the group m score on the Time Competency Scale; and, (2) behavioral change as shown by the group m score on the scale measuring for locus of control-support.

The POI was administered to two separate populations. After the first population was taken through the research design, a revised design was constructed. The inventory was again administered with the revised design approach and a new class population.

The major null hypotheses were in two categories: (1) There will be no difference in each statistical group's pre- and post-test mean scores on the POI measuring time competency; and (2) There will be no difference in each statistical group's pre- and post-test mean scores on the POI measuring support.

The lengthy inventory was administered to 13 sample subjects (s) before the course began. The subjects then participated in a semi-intensive, nonresidential, T-group experience over two consecutive weekends (six days in all). Nine days after the first administration of the inventory, the POI was readministered.

The data returned significant results after a t test was performed on the two major scales. The data revealed significant changes over the two scales measuring: (1) an individual's ability to utilize time in the present as shown on the Time Competency Scale; and, (2) an individual's ability not to be overly directed by others as shown on the Inner-Directed Scale.

The probability level α for the Tc Scale was .02 and the for the I Scale was between .02 and .05. The two null hypotheses

were rejected at α .05 (12 df).

Residual data showed change to occur on the two ratio scores measuring one's ability to use "time" well and one's ability to find a balance between "inner" and "other" directedness. In each case, after the introduction of the independent variable, the ratio score moved closer to what Shostrom termed an ideal ratio norm.

The time incompetent and time competent ratio mean scores moved from 1 : 4.4 to 1 : 6.7 with an ideal ratio score being 1 : 8. The other-directed and inner-directed mean ratio scores moved from 1 : 2.4 to 1 : 2.7 with an ideal norm considered to be 1 : 3.

Residual findings for a t statistic at 12 df are between a probability of .20 and .10 on three subscales: SAV, Sr and C. For 12 df at a probability value of .10 to .05, residual findings were reported on two subscales: S and Sy. And for 12 df at a level of significance of .05 or lower, residual findings are recorded for two subscales: Fr and Sa.

Significance

The literature search showed that little has been reported regarding the application of the POI instrument for self-actualization with the use of such change ventures as the T group. Less still has been found in the literature concerning the application of the POI to

the T group for undergraduate academic curriculums.

The literature search did uncover one use of a pre- and post-POI in a small group situation that met the definition of an intensive or semi-intensive T group. This was W. B. Reddy's study following the basic NTL model for human relations training. Yet, even in the Reddy study, the POI data is not fully reported but is used to correlate a self-actualization factor with another factor measured by applying William Schutz's FIRO-B instrument. In other words, this study differs from the Reddy study in that this study reported POI results administered on a pre- and postbasis to a semi-intensive T group and the T group was used as an instructional vehicle in a college curriculum. Few attempts of this type have been reported.

The data as reported showed change in the time competency perspective from the moment of preadministration of the POI to the moment of postadministration of the POI. The t score was judged significant at the .02 level. In essence, subjects moved to higher degrees of time competency, living more in the present than in the past or future.

In the general area of measurement dealing with a subject's locus of control, subjects showed statistically significant improvement. They became more independent and self-supportive as opposed to dependent, seeking support of others' views (as demonstrated by

the I Scale value of between .05 and .02).

The Seventh Mental Measurements Yearbook, edited by O.K. Buros, gives this critical account of the POI and yet reinforces the data reported in this paper:

> In summary, the POI lacks some desirable properties as an inventory because of the rather pervasive item overlap in its subscales. However, its two major scales, time competence and inner-support, are free of this problem if used by themselves.[1]

Therefore, the residual data will not be discussed in this section of "Significance."

Significance for the College of DuPage

Since a major function of this work is to tie theory and research to a specific institution's need, this section will briefly indulge in a discussion of the results of this study at the College of DuPage. Hopefully, those outside this community might also find this data useful when considering similar approaches to other institutions.

This work has served as a response to a requested curriculum review of a specific sociology course at Omega College, in the College of DuPage, Glen Ellyn, Illinois. It has attempted to shed light on an approach to education that sits solidly in the affective

[1]The Seventh Mental Measurements Yearbook, ed. O.K. Buros (Highland Park, N.J.: The Gryphon Press, 1972), p. 292.

domain, yet not to the exclusion of cognitive matter. It has documented that behavioral change does occur from the moment of enrollment to the moment of exit for the specific group of students under study.

Hopefully, this work will serve as one step among many which will help other instructors at the College of DuPage gain an insight into the sociology of small groups. A find line in learning theory, which artificially (yet usefully) parts social psychology into two disciplines as well as theoretical units, needs to be bridged. It is also hoped that the path which connects small groups, counseling psychology and learning theory is now a little better lit at the college, especially since a number of courses in humanistic education have been housed for years in various discipline areas at this institution. (It should not be left unmentioned that similar humanistic educational endeavors are appearing in the curriculums of business, management, speech and anthropological classes at other college institutions.)

Specific Outcomes

1. This project has served as part of a required review in Omega College, a unit of the College of DuPage.

2. This report has been shared with discipline colleagues for future instructional purposes. It has been one step of a necessary set of actions to communicate course content to faculty.

3. It will be made available through the College of DuPage Learning Resources Center for interested students and members of the community.

4. In an early stage, it was made part of the College of DuPage's Office of Institutional Research Service Program.

5. It has been made available for members of the college who teach similar courses in other fields.

6. It has resulted in a further redesigning of Social Communications. This will hopefully result in an increased use of specific learning theory, as well as an increased use of advocacy positions in approaches to education (Knowles).

Limitations of the Study

It might be useful to once more restate and discuss some problems found. The data was collected on one group at the College of DuPage, a community college in the Midwest, located outside of Chicago. The narrowness of the draw of the population sample makes it difficult for the data to be generalized to other community college students. The data must repeatedly be collected at the

College of DuPage so that the sample can be enlarged before the data can be projected to other populations. This work might serve as a pilot for further statistical ventures.

Another concern (although not unique to this POI study) is the nature of the student's "backhome" situations between the times of the two POI administrations. (Admittedly, one participant was encountering marital difficulties during this time and it is impossible to tell how much this played a part on the lowness of that person's score.) The precautions of a field study were mentioned in this work and must be re-emphasized at this time.

Further Studies

T-group experiences are unfolding on college campuses at a rapid rate, and the popular and scholarly literature admittedly states that little is being done to research these efforts. What must begin is a description of specific, humanistic education courses followed by a larger number of evaluations of these programs through instruments such as the POI. Yet, these evaluations will be worthless unless the classroom T-group design approach and degree of intensity of the groups are shared.

Hopefully, later attempts such as W. Reddy's study will occur in an elaborate form, measuring and correlating specific growth

factors of learning experiences so that teachers in the field can redesign their approaches in an attempt to aid the client and student in their growth outcomes.

This applied project has rejected the null hypothesis for the time competence factor and for the inner- vs. other-directed factor (support and locus of control). Further study of the two alternate hypotheses is now in order.

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